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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/694,976	10/28/2003	Gil-Yong Park	5000-1-476	4427
33942	7590	07/28/2005	EXAMINER	
CHA & REITER, LLC 210 ROUTE 4 EAST STE 103 PARAMUS, NJ 07652			LIVEDALEN, BRIAN J	
			ART UNIT	PAPER NUMBER
			2878	

DATE MAILED: 07/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/694,976

Applicant(s)

PARK ET AL.

Examiner

Brian J. Livedalen

Art Unit

2878

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 3-7, are rejected under 35 U.S.C. 102(e) as being anticipated by Doh et al (US 6909082).

Regarding claim 1, Doh discloses a peak detector having an amplifying terminal (amplification circuit, fig 7, 210) to reduce an offset of a peak value in a received burst signal (column 7, lines 42-45). Doh also discloses a transistor that functions as a diode (fig 7, D1) and a hold capacitor (fig 7, column 8, lines 7-20). Doh further discloses a signal amplitude detector (bottom level detection, fig 4, 5) to monitor the burst signal amplitude (column 5, lines 20-37) and a current source (transistor, fig 7, column 7, 60-62).

Regarding claim 3, Doh discloses a signal amplitude detector (bottom level detection) that generates a control signal (column 5, 24-27).

Regarding claim 4, Doh discloses a signal amplitude detector (bottom level detection) that generates a control signal and the current source is responsive to the control signal (column 7, lines 63-67).

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Regarding claim 5, Doh discloses a peak detector wherein when a negative signal is received in the transistor, the capacitor discharges (column 8, lines 10-12).

Regarding claim 6, Doh discloses a signal amplitude detector (bottom level detection, fig 4, 5) having a differential amplifier (fig 6, 50, column 4, lines 36-44).

Regarding claim 7, Doh discloses an optical receiver with the current source being a MOS FET (column 7, lines 59-67).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Doh et al (US 6909082) in view of Kaminishi et al. (US 5777507).

Regarding claim 2, Doh discloses a peak detector with a transistor that functions as a diode. Doh is silent regarding the transistor being a HBT. Kaminishi discloses a peak detector that has a transistor which functions as a diode that is a HBT (column 8, lines 36-43, column 11, lines 34-40). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the transistor of Doh to be HBT similar to Kaminishi to obtain a large current gain.

Claims 8-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Doh et al (US 6909082) in view of Nagahori et al. (US 5463345).

Regarding claim 8, Doh discloses a bottom detector having an amplifying terminal (amplification circuit, fig 8, 310) to reduce an offset of a bottom peak value in a received burst signal (column 8, lines 43-45). Doh also discloses a transistor that functions as a diode (fig 8, D5) and a hold capacitor (fig 8, column 8, lines 55-60). Doh further discloses a signal amplitude detector (bottom level detection, fig 4, 5) to monitor the burst signal amplitude (column 5, lines 20-37) and a current source (transistor, fig 8, column 9, 1-3). Doh does not disclose a current source connected in parallel to the peak hold capacitor. Nagahori discloses a current source (150) in parallel with the hold capacitor (29) (column 2, 56-60). It would have been obvious to one of ordinary skill in the art at the time the invention was made to dispose the current source in parallel with the hold capacitor to enhance the discharging speed.

With regard to claim 9, Doh in view of Nagahori discloses a signal amplitude detector (bottom level detection) that generates a control signal (column 5, 24-27).

With regard to claim 10, Doh in view of Nagahori discloses a signal amplitude detector (bottom level detection) that generates a control signal and the current source is responsive to the control signal (column 7, lines 63-67).

Regarding claim 11, Doh in view of Nagahori discloses a signal amplitude detector (bottom level detection, fig 4, 5) having a differential amplifier (fig 6, 50, column 4, lines 36-44).

Regarding claim 12, Doh in view of Nagahori discloses an optical receiver with the current source being a MOS FET (column 7, lines 59-67).


### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian J. Livedalen whose telephone number is (571) 272-2715. The examiner can normally be reached on 8:30 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Porta can be reached on (571) 272-2444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

bjl



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